☞ *Spend Five Minutes with us on Secrets of Successful Band-Sawing.—Page 1.*

CHAS. E. WRIGHT'S

Illustrated Catalogue

—OF—

Special Band-Saw Tools

—AND—

MACHINERY,

Nos. 31 to 37 CANAL STREET,

WATERBURY, CONN., U. S. A.

P. F. MALONE, PRINTER, 204 BANK STREET, WATERBURY, CONN.

OUR GUARANTEE.

THE tools shown in this Catalogue are of the latest improved pattern, and will be found in every way as represented. Any purchased through our authorized Agents may be returned to us at Waterbury, free of expense, upon trial to be made within thirty days of shipment, if not found satisfactory.

Our aim has been, in producing machinery of this class, to furnish practical, labor-saving tools, whose merits we can depend upon to establish sales, and we believe that if you are in the market for anything of this class, it will pay you to write us for discounts before ordering elsewhere.

CHARLES E. WRIGHT,

WATERBURY, CONN.

Successful Band Sawing.

MANUFACTURERS will profit by calling their sawyer's attention to a few plain facts below mentioned regarding successful Band Sawing. In view of the fact of this class of tools, so fast coming to the front among wood and metal workers, the writer feels justified in offering a few suggestions, which we trust may be worthy of attention.

It is a well-known fact among manufacturers that, whereas, some machines break as many as three or four saws daily, others will run saws for years without breakage. The secret of this, we believe, is more in the machine and saws used than in the operators themselves.

Are you one of those who are having trouble with band-saw blades? If so, try running your machine at five or six hundred per minute.

Try Non-Friction Guides, which give a good firm support to the saws without crystalizing them. (See page 8.)

Try running a thin gauge saw, with shallow teeth, that has been put together, ground, and thoroughly tested under weight pressure.

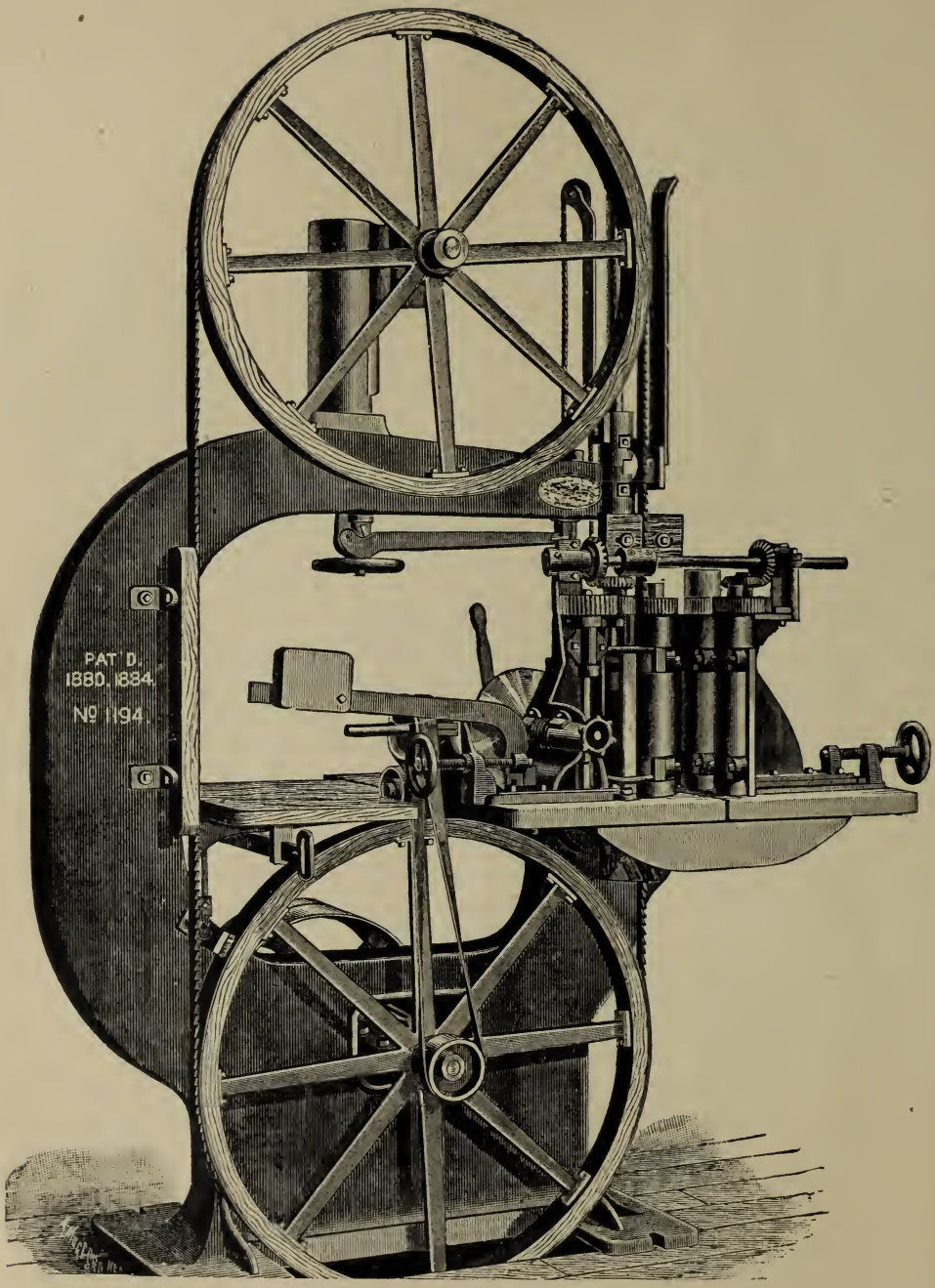
Use saws only that are well jointed and smooth on the back. A humpy saw is not worth putting on a machine. Joint your saw teeth often, so that each tooth has its own amount of work to do. Too much attention cannot be given to this, as nothing will crack saws from the *front* quicker than a long tooth.

There is no doubt that a saw properly filed will retain a fair cutting edge for five or six hours. Many use them longer, but if this is done it is at the expense of forcing saws, slow work, and breakage. Always keep your saw at its best.

Never run your saw hard against its back support, unless you have self-adjusting bearings. Carry as little tension as possible, and have your saw stand up to its work.

When your saw breaks, notice if the flaw seems to be in front or on the back edge of the blade. This will tell you whether you are being careless with your filing, or whether your are getting too much friction against your guide.

If, in following these suggestions, you still have trouble in saws breaking, you may rest assured that the fault is in the construction of the machine.



Combined Scroll and Re-Sawing Machine.

Combined Scroll and Re-Sawing Machine.

LATEST IMPROVED.

This machine is designed for those shops where there is some re-sawing, and considerable scroll-sawing, but where, for want of sufficient room or work, the use of a large special re-saw would not be advisable. It is carefully designed, heavy and powerful, having cored frame cast in one piece, extra heavy steel shafts, long bearings, and large pulleys.

The wheels are 42 inches in diameter, and 2½ inches face, with seasoned wood, rims glued up in segments. They are covered with rubber, ground true, and perfectly balanced.

The main guide has a hardened steel back roller, and the lower guide has a self-adjusting back plate.

The re-sawing attachment consists of six rolls, four of which are geared together, the two smaller ones, next the saw, acting as guides. The rolls are strongly driven by a friction wheel and disk, by means of which the speed may be instantly varied from 5 to 18 running feet per minute, or stopped altogether by a convenient hand-lever. All the parts of the feed works, including the driving belt, are immediately within the operator's reach.

The table is of iron, and is trussed underneath, so as not to spring by the pressure on lumber, and it can be tilted to cut weather boards, etc.

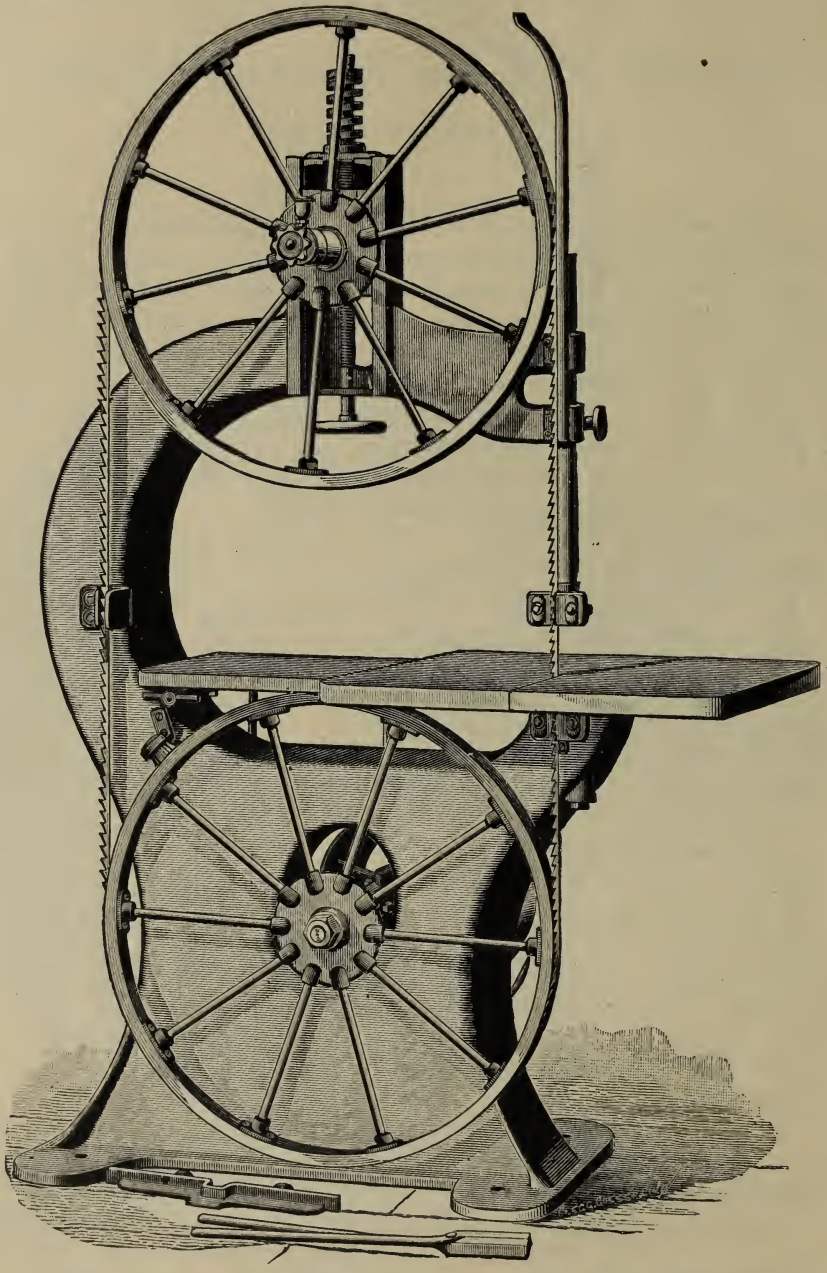
The feed works take lumber to 20 inches wide (or deep) and 4 inches thick, so as to cut at the center, or any point out of the center, and they will cut to the center of 7½ inches. Two panels, each ⅜ in. thick when planed on both sides, can usually be got out of the average of 1-inch stuff, or 5 piece, plump ⅛ in. thick, not planed.

There is a third bearing outside the driving pulleys, and a floor stand for the same.

The tight and loose pulleys are 20x6 inches, and should run 350 to 400 revolutions per minute.

Blades.—One 2-inch genuine fine French blade, and one ½-inch or ⅝-inch, are usually furnished with machine, joined, filed, and set so that everything is ready for the belts.

Weight, 2,600 pounds. Price, $425.00.



New and Improved 36-Inch Band-Sawing Machine.

Description of New and Improved Band-Sawing Machine.

This Band-Sawing Machine was designed to meet the demands of factories requiring a machine to do all kinds of light and heavy work, such as funiture, chair, piano, organ and box factories, carriage, buggy, and pattern shops, planing mills, etc.

The frame is well proportioned, cast in one piece, and cored out; the iron is equally distributed, making it very rigid and strong. The wheels are 36-inch diameter, have wood rims, made of the best ash, and are amply strong to carry any saw up to $1\frac{1}{2}$ inches, and are very light and relieve the saws of great strain in starting the machine. They are perfectly balanced, covered with pure gum, and are ground perfectly true. The shaft upon which the upper wheel revolves is made of the best forged steel, hardened and ground perfectly true. The lower shaft revolves in extra long boxes, lined with genuine Babbitt metal.

The table is of iron, planed perfectly true, and is fitted with our improved tilting arrangement, so it can be adjusted to any required angle for bevel sawing, up to 45 degrees.

There is a spring to maintain uniform tension and compensate for the contraction and expansion of saws. The upper wheel is adjusted vertically, by means of the hand-wheel shown in cut, and can be angled to lead the saw in any desired path from the front of the machine by simply turning the small wheel in the center of shaft upon which the wheel revolves.

The shifter for starting and stopping machine, and all adjustments, are in reach of the operator, and can be made without changing his position.

The upper guide can be adjusted vertically to take in any thickness of metal up to 15 inches.

We furnish with each machine one saw blade, and brazing tongs and vise.

The tight and loose pulleys are $14x4\frac{1}{2}$, and should make 450 revolutions per minute.

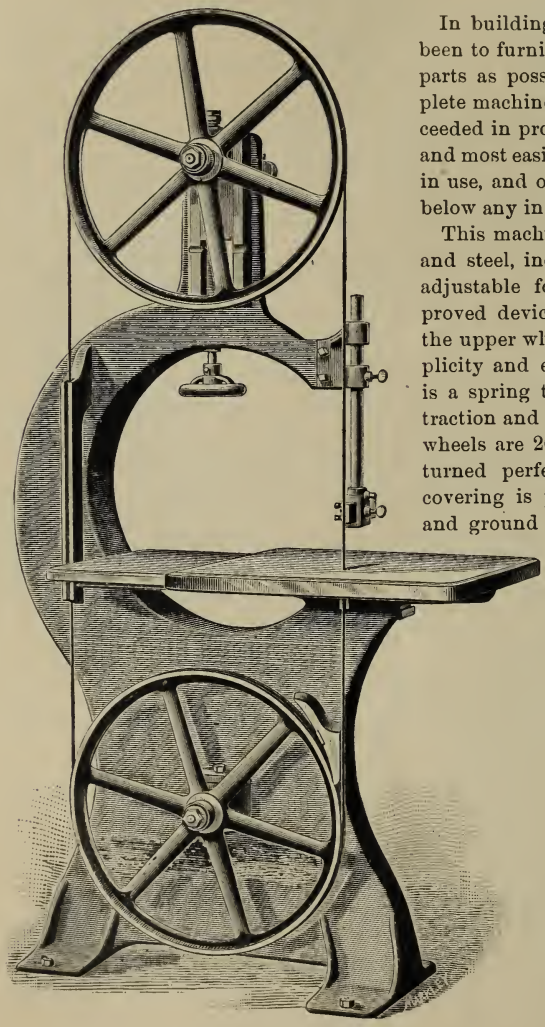
Price, $115.00.

For further particulars, address

CHARLES E. WRIGHT,
Waterbury, Conn.

No. 2 Improved Band Saw.

These machines are used extensively for sawing brass and composition metals, and are giving entire satisfaction.



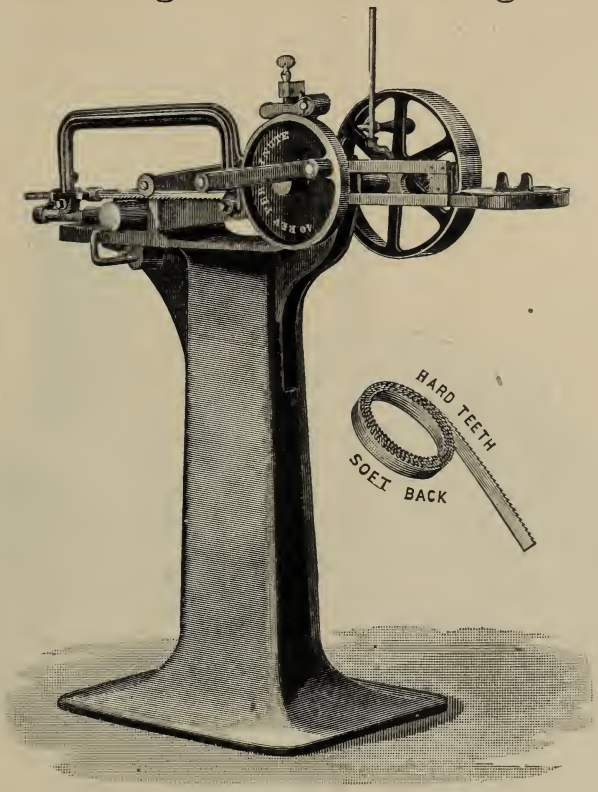
In building this machine our aim has been to furnish a Band Saw with as few parts as possible, and still have a complete machine. We believe we have succeeded in producing one of the simplest and most easily operated Band Saws now in use, and one which we can sell much below any in the market.

This machine is built entirely of iron and steel, including the table, which is adjustable for bevel sawing. Our improved device for raising and lowering the upper wheel is unsurpassed for simplicity and ease of adjustment. There is a spring to compensate for the contraction and expansion of the saw. The wheels are 26 inches in diameter, being turned perfectly true, and pure gum covering is placed around each wheel, and ground true. The frame is cast in one piece. The spindle carrying upper wheel runs in long connecting boxes. The guides adjust themselves to thick and thin lumber, and has a capacity of 12 inches under the guide. We recommend this machine for bracket, piano and organ factories; also for pattern work, planing mills, etc. In fact, the machine is suitable for general wood-working of all kinds. With each machine we furnish one saw blade, brazed, set, and filed, and one pair of brazing tongs.

Weight, 950 pounds. 26-inch wheels. Should run 475 revolutions per minute.

Price, $75.00. Write for discounts.

Automatic Magazine Metal-Sawing Machine.



NO EXTRA LABOR REQUIRED TO RUN THIS MACHINE.

By its use any metal can be sawed that a file will cut. The best, because it is operated on the right principle, strongly built, substantial, and with few parts. The cheapest,

First.—Because the saws do not break, by reason of the use of the flexible back, *i. e.*, hard teeth and soft back.

Second.—Because there is no waste in stock. By using the magazine a coil of saw stock 25 feet in length, *i. e.*, 42 cutting lengths, is employed, at a cost of $1.50, reducing thereby the cost of cutting to a minimum; thus when one length is worn out it is cut off and thrown away, and a new cutting surface is presented.

Stock 5 inches square can be cut. Stroke, 7 inches.

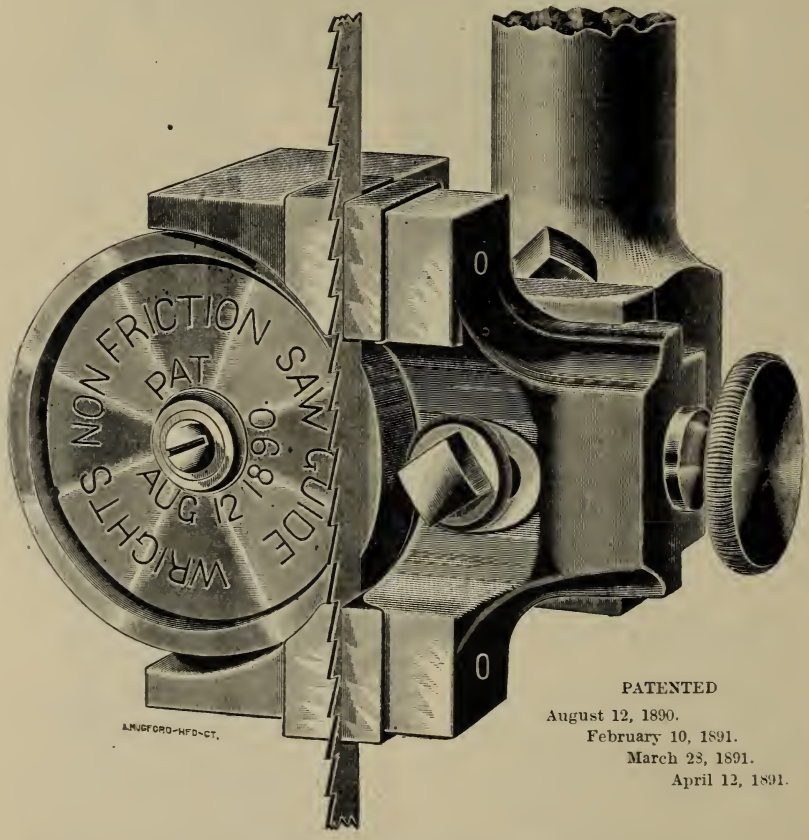
Price, $50.00. Sent on 30 days' trial. 42 cutting lengths for $1.50.

NOTICE.

All saw guides having a disk so mounted that the back of the saw will bear against the face of the disk and rotate it, are infringements.

The trade is hereby notified that any person who manufactures, sells, or uses saw guides which infringes Wright's Patent of August 12, 1890, are liable for damages.

Our guides have name and date of patent stamped on them.



PATENTED
August 12, 1890.
February 10, 1891.
March 28, 1891.
April 12, 1891.

Don't be fooled into buying something claimed to be just as good as Wright's Non-Friction Band-Saw Guide until you have tried one, at our expense. Saves 60 per cent. of wear and breakage of saws. Will fit any machine. Will take saws from 1-16 to 10 inch wide. Thirty-seven hundred in use. Send for descriptive circular.

Price, $10.00.

Wright's Patent Non-Friction Band-Saw Guide.

The preceding cut represents one of the small tools that no band sawyer can afford to be without, as it is a well-established fact that where the back of saws run against stationary guide plates much heat is generated by the friction, causing saws to expand and crystalize at the back. This, beyond doubt, is the great cause of saws *checking* and *breaking*.

Some try to overcome the difficulty by the use of oil, which soon destroys the rubber bands; others run saws on the edge of roller guides, but the bearing is insufficient to give proper support to the saw, and breakage is the result.

With the Wright Guide you have 1½ inch revolving bearing, which cannot upset or crystalize saws. *This we guarantee.* They are simply adjusted, strong and durable, and provided with self-oiling adjustable bearings.

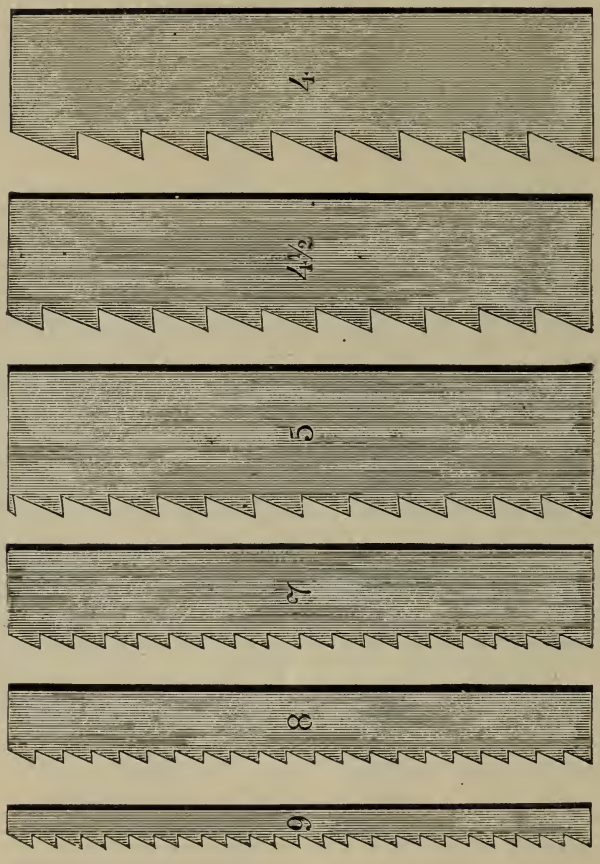
We ship these guides subject to thirty days' approval, depending entirely upon the merits of the article in establishing the sale.

Let us send you one on trial.

CHARLES E. WRIGHT,
Sole Manufacturer,
Waterbury, Conn.

PRICE LIST (PEUGEOT AINE),

Genuine French Band-Saw Blades.



	3-16	¼	5-16	⅜	½	⅝	¾	⅞	1	1¼	1½
16 feet	$0.60	$0.72	$0.80	$0.88	$1.28	$1.44	$1.68	$1.92	$2.08	$2.88	$3.36
18 feet	.68	.81	.90	.99	1.44	1.62	1.89	2.16	2.34	3.24	3.78
20 feet	.75	.90	1.00	1.10	1.60	1.80	2.10	2.40	2.60	3.60	4.23
22 feet	.82	.99	1.10	1.21	1.76	1.98	2 31	2.64	2.86	3.96	4.60
24 feet	.90	1.08	1.20	1.32	1.92	2.16	2.52	2.80	3.12	4.26	5.04

These prices are net and do not include brazing, setting, or filing.

Price List of Warranted Band-Saw Blades.

Width.	1/8–1/10 1/4–3/16	5/16–3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2	1 3/4	2
Gauges. No. 20 ...	20	20	20	19	19	19	19	19	19	19	19
No. 21 ...	21	21	21	20	20	20	20	20	20	20	20
No. 22 ...	22	22	22	21	..	..	..	..	..	..	..
No. 24 ...	24	..	..	22	..	..	..	..	..	..	..
No. 25 ...	25	..	**Special Discount, 15 per cent.**								
Per ft.	$0.06	$0.07	$0.08	$0.10	$0.12	$0.13½	$0.15	$0.18	$0.22	$0 27	$0.32

Set and filed ready for use to ¾ inch, 40 cents; ¾ to 1¼, 60 cents each saw; extra net.

Re-Saws at Special Prices.

All our Saws are brazed to length without charge.

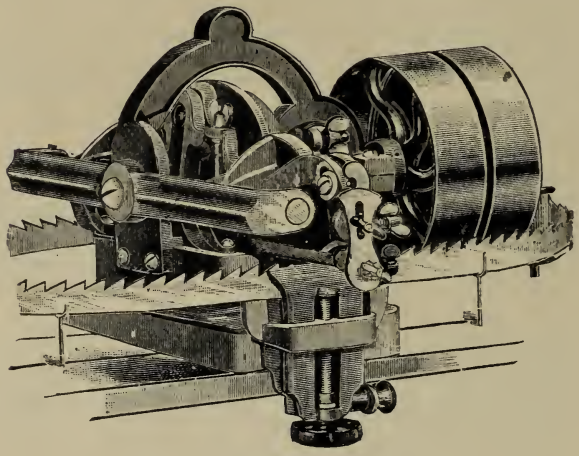
We wish specially to call your attention to our Warranted Band-Saw Blades, the characteristic feature of them being their toughness and even temper. These blades are made of the best Swedish Steel, each saw being tested under a heavy weight pressure, while running at a high rate of speed.

Our way of grinding, *after* the joint is made, brings the saw to a standard gauge in all places, thus avoiding an uneven set where machines are used for this purpose.

The increasing demand for these saws leads us to believe our effort to please is being appreciated. We warrant each blade to be perfect in finish and quality. It will pay you to give these Saws a trial.

CHARLES E. WRIGHT,
Waterbury, Conn.

Improved Band-Saw Filing Machine.



The cost of filing band-saws by hand, in a mill of ordinary capacity, will range from $50 to $150 annually. Large mills will far exceed that sum. It is, therefore, of the utmost importance to wood-workers to provide themselves with machines to do this work in a much less expensive manner.

The above cut represents a machine of this class, so simple that a child could operate it intelligently and do satisfactory work.

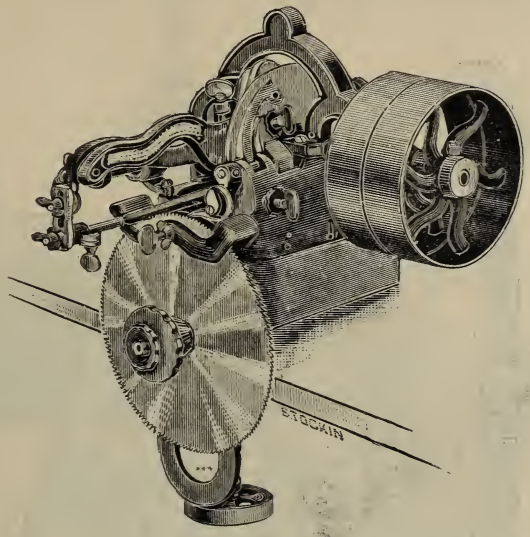
We can confidently recommend it as being the only filing machine on the market which is durable, and ordinarily low in price.

We guarantee, with proper use, two-thirds of the ordinary expense of hand filing will be saved to the user of our machine.

Consider this. We ship these machines on thirty days' trial, and any found that do not conform with the above may be returned to us at our expense.

Price, complete, $35.00.

Circular Saw-Filing Machine.



IS THIS WHAT YOU HAVE BEEN LOOKING FOR?

Our Circular Saw-Filing Machine is made substantially the same as our Filing Machine for Band Saws, with the exception of the vise, which is adapted to receive circular saws.

WILL KEEP SAWS PERFECTLY ROUND.

This is a point which will be greatly appreciated, especially by metal workers, as it is well known that saws cannot be filed perfectly round by hand filing.

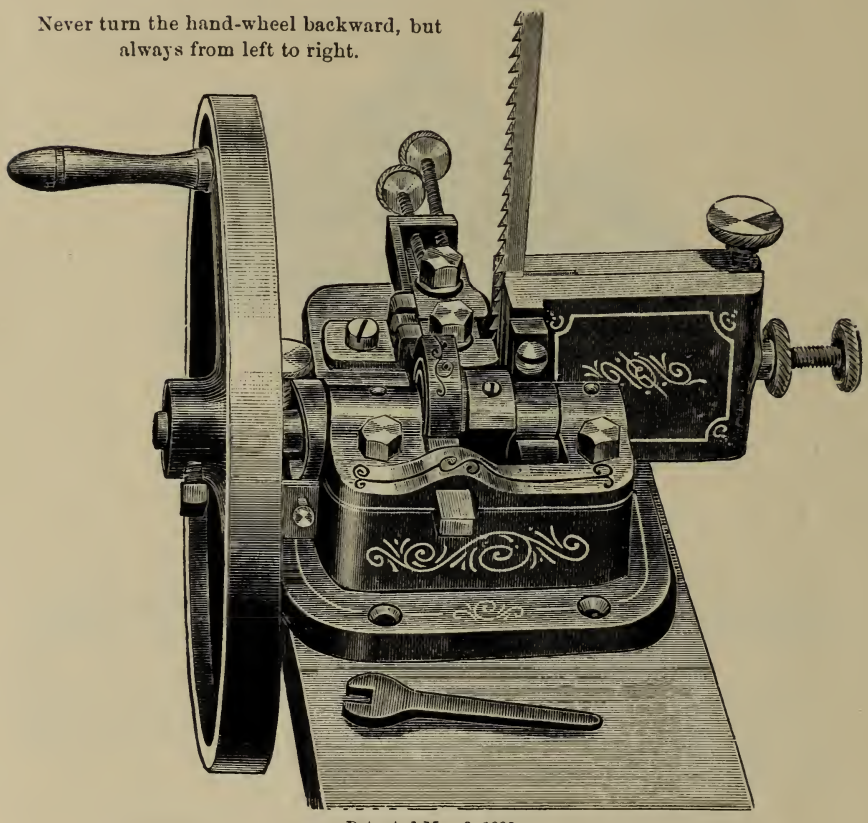
Our machine is adapted only to file saws *straight across the teeth*, and will take teeth only to $\frac{1}{2}$ inch in length, such as can be covered by an ordinary taper file.

It will take saws from 4 inches to 16 inches in diameter. It is perfect in its movement, and saws are easily and quickly put in.

Price, $35.00, f. o. b. at factory.

Improved Band-Saw Setter.

Never turn the hand-wheel backward, but always from left to right.

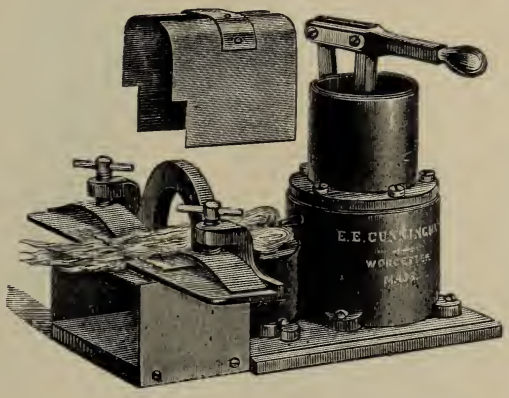


Patented May 2, 1882.

The users of band saws have long felt the need of a machine that would hold a narrow saw in a rigid position and set the teeth without straining the blade. We have arranged this machine to work by an easy uniform crank motion, and when the tooth to be set is fed into position, the blade is firmly locked between the steel jaws of a vise, and remains immovable while the tooth is set to any degree required. As the crank goes forward the blade is released, when the next tooth is fed up to the dies, the blade again locked in the vise, and this tooth set in the opposite direction. All these movements are automatic, and can be carried on at a speed of 300 teeth per minute. The feeder picks up *only the tooth that is to be set*, consequently each tooth is fed to its proper position, *regardless of their irregularity*. It will set saws from $\frac{1}{8}$ to 2 inches wide.

List price, $20.00. Sent on trial.

Improved Brazing Machine.



When once used this machine will be found indispensable. It will braze a 1-inch saw in a moment's time, and entirely does away with the inconvenience of sending saws outside for repairs. If you are brazing in the old-fashioned way, with tongs, let us send you a sample machine on thirty days' trial.

Price, $8.00.

Price List of Silver Solder.....per ounce, $1.40
Price List of Brass Solder.....per ounce, .25
Price List of Fine Annealed Wire for binding joints . . . per ounce, .10
Price List of Rubber Bands for Wheels, 3-16 inch, $\frac{1}{4}$ inch, and $\frac{3}{8}$ inch thick .....per pound, 1.40

In ordering rubbers for wheels, please state width of face and diameter of wheel, and thickness of band wanted.

SPECIAL BAND-SAW FILES.

	3 in.	3½ in.	4 in.	4½ in.	5 in.	5½ in.	6 in.	7 in.	8 in.
Tapers, per doz	$1 10	$1 10	$1 20	$1 40	$1 70	$2 00	$2 40	$3 00	$3 80
Tapers, each	11	11	12	14	17	20	24	30	38
Tapers, Slim, per doz	1 20	1 20	1 30	1 45	1 70	1 90	2 10	....	....
Tapers, Slim, each	12	12	13	15	17	19	21	...	....

For Band-Saw filing these files will be found superior to the ordinary taper file on the market, as they are fine cut, thus giving a smooth point to the tooth. They are perfect in temper and finish, and are nicely adapted for both hand and machine work.

Less 60 per cent. Discount.

BAND-SAW VISES.

Price, $7.00.

Price, $4..00

EASTERN AGENTS FOR

E. C. ATKINS & CO.'S

Celebrated Patent Ground Circular Saws.

We carry in stock a complete line of these tools, and can fill your order promptly. Let us make an estimate on your next order. We can save you money.

CHARLES E. WRIGHT,

Waterbury, Conn.